the work he did for the colony in the introduction of useful and interesting plants. He also did much for the improvement of the sugar-planting industry, and investigated many other problems of economic importance. In 1908 the Government grant for the garden and herbarium was much reduced, but although sadly hampered Medley Wood did not relinquish his efforts, and he was keenly interested in his work up to the end.

Dr. Medley Wood was appointed director of the Natal Garden, but he ceased to hold that office when it was recently handed over to the Corporation of Durban, and he then became director of the Natal Herbarium.

Two years ago the honorary degree of D.Sc. was conferred upon him by the University of the Cape of Good Hope, an honour which was a very fitting recognition of the great value of his services to botanical and agricultural science in South Africa, and gave much pleasure to his many friends.

NOTES.

We notice with much regret the announcement of the death, at ninety-two years of age, of M. J. H. Fabre, whose patient studies of the life-histories of insects, as recorded in his "Souvenirs Entomologiques" and other works, placed him in the front rank of outdoor naturalists throughout the world.

The Faraday Society will hold a general discussion on "The Transformations of Pure Iron" on Tuesday, October 19. The president, Sir Robert Hadfield, will preside over the discussion, which will be opened by Dr. A. E. Oxley, of Sheffield. Tickets may be obtained from the secretary of the Faraday Society, 82 Victoria Street, S.W.

We learn from *Science* that Dr. Max Planck, professor of physics at Berlin, and Prof. Hugo von Seeliger, director of the Munich Observatory, have been made knights of the Prussian Order of Merit. Dr. Ramón y Cajal, professor of histology at Madrid, and Dr. C. J. Kapteyn, professor of astronomy at Groningen, have been appointed foreign knights of the same Order.

The council of the Chemical Society has arranged for three lectures to be delivered at the ordinary scientific meetings during the coming session. The first of these lectures will be delivered on November 18, by Dr. E. J. Russell, who has chosen as his subject, "The Principles of Crop Production." The titles of the two later lectures to be delivered on February 3 and May 18, by Prof. W. H. Bragg and Prof. F. Gowland Hopkins, respectively, will be announced later.

The new session of the Royal Geographical Society will open on November 15 with a paper by the president, Mr. Douglas W. Freshfield, on the southern frontiers of Austria. Among other papers to be read at evening meetings are:—The work of the Peru-Bolivia Boundary Commission, Sir Thomas H. Holdich; The geographical and ethnic position of the Slavs between the Adriatic and the Drave, Sir Arthur Evans; Cyrenaica, Prof. J. W. Gregory; The Troad and the command of the Dardanelles, Dr. Walter Leaf; The valley of Mexico, A. P. Maudslay; and the Gold Coast, A. E. Kitson.

A Reuter message from Paris states that the French Minister of War has appointed a consulting committee of experts attached to the Under-Secretaryship of Military Aeronautics. Among other well-known names, the Committee, which is presided over by the Under-Secretary himself, includes M. Appell, who occupies one of the chairs of mechanics at the Sorbonne; M. Robert Esnault; M. Pelterie; M. Deslandres, director of the Meudon Obsrvatory; M. Deutsch, president of the Aero Club; M. Renault; M. Clement Bayard; M. Eiffel; and M. Kling, director of the Municipal Observatory.

We regret to notice that the *Engineer* for October 8 announces the death in action in France of Capt. W. McLeod Macmillan, of the 11th Argyll and Sutherland Highlanders. Capt. Macmillan was the chairman and managing director of the old-established shipbuilding firm of Archibald Macmillan and Son, Dumbarton, and was in his fortieth year. He was educated at Fettes College, Edinburgh, and succeeded his father in 1910. He acted for a period as chairman to the Clyde Shipbuilders' Association, and was a member of the council of the Institution of Engineers and Shipbuilders in Scotland.

At the recent International Congress of Mathematicians at Cambridge it was decided that the next congress should meet at Stockholm in 1916. The King of Sweden offered a gold medal with the likeness of Karl Weierstrass and a sum of 3000 crowns for an original important discovery in the domain of the theory of analytical functions. Competing manuscripts were to have been sent to the editor of *Acta Mathematica* before October 31 next, the centenary of the birth of Weierstrass. We are informed by Prof. Mittag-Leffler that in accordance with a widely expressed wish, the King of Sweden has decided, in view of the European war, to postpone the last day for the receipt of competing memoirs until October 31, 1916.

It is announced in the *Pioneer Mail* that the third annual meeting of the Indian Science Congress will be held in Allahabad from January 13–15, 1916, when Sir Sidney Burrard, F.R.S., will be president. The chief sections will be physics, chemistry, zoology, botany, agriculture, and ethnology, and the presidents of the respective sections Dr. Simpson, of the Meteorological Department; Dr. Sudborough, of the Research Institute, Bangalore; Dr. Woodland, of Allahabad; Dr. Howard, of Pusa; Mr. Coventry, of Pusa; and Mr. Burn. It is hoped that the local committee will persuade Dr. Bose to give a public lecture on his own researches. The local secretaries for this year are Dr. Hill, of Muir College, and Mr. P. S. Macmahon, of the Canning College, Lucknow, to the latter of whom all communications should be addressed. The congress is under the general control of the Asiatic Society of Bengal.

We announce with regret the death in action in Flanders on September 25 of Major A. J. N. Tremearne, of the 8th Seaforth Highlanders. An Australian by birth, he served in the South African war, and later obtained an appointment in the Nigerian Police Force. There he acquired proficiency in the Hausa language, and studied the anthropology and folklore of this people. He then gained a scholarship at Christ's College, Cambridge, and was awarded the diploma in anthropology. The results of his work in Nigeria were published in "Hausa Superstitions and Customs," and "The Tailed Hunters of Nigeria." Later on he visited North Africa and published a work on demonology, entitled "The Ban of the Bori," in 1914. His sympathetic knowledge of the African races enabled him to carry out valuable field work, and the results of this were published in numerous papers in the Transactions of the British Association, the Royal Anthropological Institute, and the Folklore Society. It will be difficult to fill his place as a competent field anthropologist.

THE *Revue Scientifique* for September 18 reproduces an important address delivered at the Conservatoire des Arts et Métiers in February, by Prof. J. Violle. Its subject is the future of the physical industries of France after the war. By a comparison of the statistics of import and export of the countries of Europe he shows how France has in the last twenty or thirty years lost its place as a leading constructor of mechanical, electrical, and optical apparatus for the civilised world. He urges on the Government the importance of providing schools for the training of skilled workmen, of a National Laboratory of Weights and Measures on the lines of the National Physical Laboratory of this country, the Bureau of Standards of Washington, and the Physikalische Reichsanstalt of Germany. The country urgently needs such a central institution to which the scientific problems which arise in industry may be taken for solution. Behind these requirements he recognises the importance of following the example of Russia and removing the formidable temptation of alcohol from the workman's path, and points out finally how in the workshop, in the field, no less than in the army, France is suffering from "the shameful reduction in the birth rate."

THE abnormal condition of the market for feeding stuffs caused by the war suggested to Prof. Hendrick and Mr. W. J. Profeit the experiment described in Bulletin No. 20 issued by the North of Scotland College of Agriculture. The object of the experiment was to determine the feeding value of palm-kernel cake in comparison with linseed and decorticated cotton cakes. The first of these cakes is a feeding stuff hitherto little used in this country, almost the whole production going to the Continent, chiefly to Germany, where it has always found a ready market. Now, however, large stocks of palm-kernel cake are, or shortly will be, at the disposal of the home feeder. In Prof. Hendrick's experiment thirty head of cattle were divided into three lots, each consisting of six heifers and four bullocks. Throughout the period of eighty-four days covering the experiment, each lot of animals was fed with one variety of cake mixed with locust-bean meal in addition to a diet of swedes and straw to all alike. The three lots of cattle all did well, and the return in live weight increase was practically the same for each kind of cake. The monetary return from the palm-kernel cake was, however, considerably better than that given by either cotton or linseed cakes at present prices. Some doubts have been expressed as to the keeping properties of palm-kernel cake owing to the oil becoming rancid, but no difficulty of this kind was found after nine months' storage. The high percentage of fibre in this cake does not appear to affect the digestibility of the feeding stuff.

THE Board of Agriculture and Fisheries is circulating an appeal by Lord Selborne to the farmers and occupiers of land in England and Wales calling on them to produce as much food as possible during the coming year. No hope of financial support from the State is held out, but farmers are asked to do their part in increasing the supply of food as the special war service which they can render to their country. Leaving the precise means to be adopted to the farmer's judgment and to the advice of his friends and neighbours, it is suggested that the object in view may be attained by one or more of the following methods:—(*a*) By ploughing up the poorest permanent pasture and so increasing the arable land; (*b*) by shortening the period for which existing arable land is kept under clover or rotation grasses; (*c*) by improving the remaining grass land so that it will carry more stock; and (*d*) by reducing the acreage of bare fallow wherever possible. Lord Selborne realises the many special difficulties that have to be overcome, of which the chief is that of labour. Arrangements have already been made that men skilled in agricultural work, such as shepherds and engine-drivers, are not to be accepted for enlistment, yet this difficulty will remain with regard to the supply of ordinary farm labour. Machinery is to be set up to link the actual producer with the Board of Agriculture through the agency of local committees in each district, acting under the guidance of a War Agricultural Committee for each county. The farmer should consult his local committee on any problems or difficulties that may confront him. By this means it will be possible for the President of the Board to be kept informed of the needs of farmers throughout the country and to secure that all the help that can be given them is placed at their disposal.

THE idea of a universal permanent or durable peace has seemed to many minds merely Utopian. But the peculiar circumstances of a world-war are more and more forcibly impressing upon the world the desirability of realising the idea, and are also beginning to make clear the necessary bases of such realisation. The present war may be termed scientific from many aspects, and a permanent world-peace can only be attained by scientific study of the causes of war and of the possible ameliorating conditions. Several publications dealing with these matters have reached us recently. The Swiss thinker, Prof. August Forel, shows, in his "Die Vereinigten Staaten der Erde," how the causes of war and of this war are rooted in every department of social life and organisation. The *brochure* has many interesting *aperçus* on national psychology, and the meaning of race-hatred, warfever, and the like. It is worth translating into English for its scientific insight alone. In 1795 Immanuel Kant drew up a programme, "Zum Ewigen Frieden," which is still a classic. Messrs. George Allen have been well advised to issue this with translation in pamphlet form. The manifesto of the Central Organisation for a Durable Peace, at 51 Theresiastraat, the Hague, gives a minimum-programme for the bases of such peace, chiefly to invite suggestions and co-operation. It is the result of the international meeting held at the Hague last April. The *Comité Suisse pour l'étude des bases d'un traité de paix durable* have, on the lines of the Hague manifesto, issued a valuable *mémoire*, not individual, like M. Forel's, but impersonally legal. It contains references to articles of conventions and to recent literature on the general subject of permanent peace. Certainly there is now in process of creation a science of peace-maintenance, the successful results of which may regenerate both national and international life.

IN the issue of the Journal of the Royal Anthropological Institute for January–June, 1915, the president, Prof. A. Keith, publishes his presidential address on the Bronze age invaders of Britain. He fixes the date of this invasion about the year 2000 B.C., and he states that we are not yet in possession of sufficient evidence to determine how far this round-headed race replaced the older inhabitants of Britain. There were several parts of England, Wales, Scotland, and Ireland which they failed to penetrate; at least, we have not found in these parts their peculiar "round-barrow" graves. The problem is to ascertain the birthplace of this race. We find merely secondary settlements along the eastern shores of the North Sea and at the possible points of their embarkation. The hypothesis that they came from Asia may be discarded, as the belief is growing that our own continent may have produced its own races. The centre of dispersion was probably the central mountainous region of Europe. In Denmark we recognise two invading waves of round-heads, but the older or neolithic wave contained men marked by all the characters which we recognise in the English round-barrow people. They also settled in south Sweden, south-west Norway, at the mouths of the Elbe, Weser, and Ems, advanced down the Rhine valley, and reached the coast of Normandy. The paper deserves attention as an able summary of the results of modern research.

THE *Indian Journal of Medical Research* for July (vol. iii., No. 1) contains a number of valuable papers on subjects relating to tropical medicine. Major MacGilchrist discusses the relative therapeutic value in malaria of the cinchona alkaloids, and finds that hydroquinine is clinically superior to quinine and all the others.

THE report of the director-general of public health, New South Wales, for the year 1913, recently issued, contains a mass of statistical and other information relating to the public health of that colony. One of the most interesting sections deals with an outbreak of small-pox in Sydney, showing how mild and insidious this disease may sometimes be. It is also of interest because the disease was successfuly inoculated upon the calf.

THE third report of the Government Bureau of Microbiology, New South Wales, contains a number of valuable reports on the diseases of man, animals, and plants occurring in the colony, and on agricultural and economic problems. A diphtheroid bacillus was isolated from a number of surgical lesions in children. It was, however, not the true diphtheria bacillus; it conformed to one particular and distinctive type, which can be identified with comparative ease, and is named by Dr. Cleland the *Bacillus chirurgicalis*. The organism was usually non-virulent to guinea-pigs.

MANY biochemical reactions proceed in the manner of a mono-molecular reaction, as, for example, the killing of micro-organisms by heat and by disinfectants. T. Madsen and T. Watabiki show that the same holds good for the destruction of "complement" of blood-serum and of "hæmolytic amboceptors" by heat, the relation between the temperature, and the rapidity of reaction in both cases conforming in general to the law of van't Hoff and Arrhenius (*Bull. de l'Acad. Roy. des Sc. et des Lettres de Danemark*, 1915, No. 2).

"THE bird as a labourer," remarks a writer in the autumn number of *Bird Notes and News*, "is not recognised by the Board of Agriculture." This is indeed the case, because the Board has not yet risen to a full sense of its responsibilities. When it does it will establish a Bureau of Ornithology, such as has long been at work, both on the Continent and in the United States. In these countries the value of birds as destroyers of insect pests and of noxious weeds is fully recognised. The present number of our contemporary contains some valuable information on the subject of birds in relation to the farmer and gardener.

DR. J. M. DEWAR, in the *Zoologist* for September, continues his observations on "The Relation of the Oystercatcher to its Natural Environment." The present notes are concerned with the summer environment, and the nature of the nesting-sites and sources of food supply. The breeding-stations within the area examined fall into three distinct habitats—a hill-stream, a river-valley, and a beach habitat. But a strong similarity exists between all the stations of each habitat, variability of the factors being much less pronounced than in the winter environment. In such inland stations earthworms, tipulid, and coleopterous larvæ form the staple food of the young. In the lake-beach area a large sand-bank at the head of the loch, and a boulder area on its north shore, are used every year by the birds that have failed to breed, as places of assembly for bathing, sunning, and other activities. We should have been glad of some statement as to the number of birds breeding at these stations. But these details will perhaps be given in a later article, for the series is not yet completed.

MR. A. H. CLARKE, in the *American Naturalist* for September, discourses at length on asymmetry as developed in the genera and families of recent Crinoids. He maintains that the less favourable the environment as a whole the greater becomes the proportion of asymmetrical forms. The two main factors in producing asymmetry are bathymetrical and thermal. This feature is least developed at the optimum temperature for crinoid life, and most developed in temperatures which are phylogenetically too warm or too cold. Excessive cold appears to be the determining factor in the asymmetry of the genus Promachocrinus; while the opposite condition, excessive warmth, similarly affects the family Comasteridæ. Internal unfavourable conditions, the author insists, have also to be taken into account, such, for example, as are induced by incipient phylogenetical degeneration through type-senescence, as in the Plicatocrinidæ, which, in recent seas, represent the almost exclusively Palæozoic Inadunata.

A FURTHER instalment of Mr. J. F. Duthie's "Flora of the Upper Gangetic Plain" has now been published. The present section, which forms part i. of vol. iii., deals with the families Nyctaginaceæ to Ceratophyllaceæ, and occupies 168 pages. The Euphorbiaceæ and Urticaceæ are among the most important of the families included, the former with twenty-one genera and the latter with seventeen. The genus Ficus, which has some 600 species, is represented in the Upper Gangetic plain by eighteen species, among which are such well-known trees as *Ficus bengalensis* and *F. religiosa*.

Monthly Weather Reviews are published with great regularity by the Government of India, and the issue for March, 1915, shows considerable activity on the part of the meteorological department. The review, which is drawn up under the superintendence of Dr. G. C. Simpson, is based on observations taken daily at 8 hrs. at 215 stations, and on additional observations taken at 10 hrs. and 16 hrs. at 14 stations. For the summary of rainfall, observations are used from about 2,300 stations. March was remarkably wet over by far the greater part of the Indian area, and with these conditions the air was damper and the sky more cloudy than usual in most parts of the country. The departures from normal temperature were generally feebly marked, whilst the barometric pressure in the plains was in excess of the normal. Observations are given of solar, magnetic, and seismic disturbances. Much detailed information can be obtained from the tabular results and from the illustrations contained in the review.

RAINFALL values for August, 1915, are given in *Symons's Meteorological Magazine* for September, and the results show very varied conditions for the month. Last August is so commonly quoted as being wet that it is somewhat surprising to find that the percentage of the average rainfall was 72 for England and Wales, 68 for Scotland, 83 for Ireland, and 75 for the British Isles as a whole. The London rainfall was 95 per cent. of the average, from the observations at Camden Square, but it may be remarked that the rainfall was much heavier at South Kensington, the recording station of the Meteorologcal Office, where the fall was about 50 per cent. above the normal. The values given for the several stations in different parts of the British Isles show very varying results. The greatest excess on the normal occurred at Shoeburyness, where the fall was 166 per cent. of the average, and this is at a station which is notably one of the driest in the whole kingdom. Scathwaite, which is normally the wettest portion of the kingdom, had only 37 per cent. of the average, which is as great a deficiency for August as any part of the country. The map giving the rainfall for the Thames Valley shows that the rains were extremely irregular and patchy, particularly in the neighbourhood of London.

A NOTE on the divide produced by a plate in a moving liquid is contributed by Mr. Tsuruichi Hayashi to the *Tôhoku Mathematical Journal,* viii., 1. The author arrives at the conclusion that "the divide is the locus of point (*sic*) from which two shortest equal normals can be drawn to the periphery of the plate immersed." But this result is based on an assumption for which justification is sought in quotations from Duchemin's results, taken from De Villamil's recent book on "Motion of Liquids," with explanatory additions in square brackets. From these extracts the Japanese writer bases his conclusions on the assumption that the lines of flow along the face of the plate are straight lines normal to the boundary. Unfortunately, however, this assumption appears to be based on a distorted quotation of Duchemin's actual statements, and the reference to "curved" diagonals in the case of a rectangular plate, which is attributed to Duchemin, would appear to "unjustify" (if such a word may be made) the interpretations which have led to the present writer's conclusions. It is easy to construct cases where the result would evidently not hold good, in particular in the case of figures with re-entrant angles, or again, figures composed of two or more separate areas.

AN important paper, which marks a real advance in the chemistry of the sulphites, has been contributed to the September issue of the Journal of the Chemical Society by Mr. C. S. Garrett from the University of Liverpool. It is shown that no power of selective absorption of light is possessed by the neutral sulphites, such as Na_2SO_3, or by the two types of alkyl sulphites, such as $C_2H_5.O.SO.O.C_2H_5$ and $C_2H_5.SO_2.O.C_2H_5$. Sulphurous acid in aqueous solutions, on the other hand, gives a very well-marked maximum of absorption at wave-length 2760. The important discovery is now announced that the acid sulphites, such as $NaHSO_3$, and the metabisulphites, such as $Na_2S_2O_5$, show no selective absorption in freshly prepared aqueous solutions, but develop this property after keeping for some weeks, especially if exposed to light. It is suggested that this alteration of properties is due to the chemical changes represented by the equations—

$$2NaHSO_3 \rightleftharpoons Na_2SO_3 + H_2SO_3$$
$$H_2O + Na_2S_2O_5 \rightleftharpoons Na_2SO_3 + H_2SO_3,$$

whereby the non-absorbent compounds on the L.H. of the equation are converted into a non-absorbent sulphite and an absorbent form of sulphurous acid. Incidentally, it follows that this absorbent compound must have a different structure from that of all its derivatives; but as the gas gives an absorption-band at wave-length 2961, it is suggested that the absorbent compound is a hydrated form of sulphur dioxide formed according to the scheme—

$$(x-1)H_2O + H_2SO_3 \rightleftarrows SO_2,xH_2O.$$

THE use of chains for power driving has increased greatly, and we note with interest from the *Engineer* for October 8 an account of a chain drive transmitting about 5000 horse-power in a hydro-electric plant on the Snake River in the State of Oregon. The chains connect the waterwheel shafts to the generator shaft, and the arrangement was designed to meet conditions imposed by financial considerations. These conditions necessitated the adaptation of generators designed for direct connection to waterwheels running at 225 revs. per minute under 50-ft. head, to the same wheels running at 160 revs. per minute under 20-ft. head. The generator is of 3600 kilowatts, three-phase, 60 cycles, and had to be operated at the intended speed. The problem was solved by changing the position of two waterwheel units, providing additional shafting, and driving the generator shaft from the two waterwheel shafts by driving chains and sprocket wheels. Each set of driving chains consists of four Morse silent chains, 22 in. wide, and transmits 2500 horse-power. This is believed to be the most powerful chain drive plant in the world, the nearest to it being that at Indianapolis, which drives a 1200 horse-power generator.

OUR ASTRONOMICAL COLUMN.

COMET 1915*d* (MELLISH).—A card from the Copenhagen Observatory informs us that the following elements and ephemeris have been calculated by Messrs. Braae and Fischer-Petersen for Mellish's comet from observations at the Yerkes Observatory on September 18 and the Lick Observatory on September 19 and 20:—

$$T = 1915 \text{ Oct. } 11{\cdot}933 \text{ M.T. Berlin.}$$

$$\left.\begin{array}{l}\omega = 108^\circ\ 33'{\cdot}16\\ \Omega = \ 72^\circ\ 50'{\cdot}17\\ i = \ 49^\circ\ 41'{\cdot}62\end{array}\right\}1915{\cdot}0$$

$$\log q = 9{\cdot}72054$$

M.T. Berlin.

	R.A. (true)			Dec. (true)	
	h.	m.	s.	°	′
Oct. 14	13	38	38	+5	5·7
16		50	47	2	45·6
18	14	2	27	+0	25·7
20		13	39	−1	52·6
22		24	24	4	8·3
24		34	47	6	20·6
26		44	49	−8	29·0

A LARGE FIREBALL.—Mr. W. F. Denning writes:—"On the night of October 5 at 10h. 56m. Mrs. Fiammetta Wilson saw a large fireball from Portscatho, near Falmouth. It appeared in the N. by E. sky, its observed path being from 140°+68° to 126°+57°. A remarkable feature about the object was that it left a streak which remained visible for 17½ minutes, and underwent some curious transformations during the time it continued luminous. At first a straight band of glowing light, it gradually resolved itself into a large oval, which drifted slowly eastwards.

"The meteor must have been one of the most brilliant which has appeared for some time, and it is desirable to obtain further observations, both of the flight of the object and of the successive positions of the streak it left."

Mr. Arthur Mee sends us the following note upon the object:—

"A remarkable meteor was seen in south-west Wales on the evening of October 5. An observer at Mumbles says it appeared at seven minutes to eleven, and that the 'tail' retained its form for a minute and a half, and then gradually took the appearance of a hook, broadening as it did so, and finally fading away some seven minutes later. The meteor itself was so brilliant that it alarmed a dog and made it run indoors. An observer at Milford Haven says the appearance after the explosion of the meteor was that of a luminous cloud, 'a gigantic smoke-ring with wings.' It was first noticed in the zenith, and then gradually drifted in a north-easterly direction, becoming more diffuse, and finally disappearing soon after 11 o'clock. It was a bright, starry night, and the meteoric cloud was evidently self-luminous; the stars were seen quite clearly through it."

RECENT OBSERVATIONS OF VARIABLES.—One of four variable stars discovered by Dr. Silbernagel in 1907, since designated SS Aurigæ, belongs to the small class of long-period irregular variables of which U Geminorum is the best-known example. Almost from discovery it has received attention at Utrecht, where a large number of visual observations have been made by Prof. A. A. Nijland and Mr. van der Bilt (*Astr. Nach.*, 4814). Although most of the time it remains beyond visibility in the 10-in., twenty-five of its rather sudden accessions of lustre were followed during 1912–13. Of these, fourteen were "long" and eleven "short" maxima; correspondingly it was recorded brighter than 14·0m. for periods on the average of 14·6 and 8·2 days, attaining in the one case to 10·7m., in the other only reaching 11·0m. The mean curve for the "long" type of maximum almost precisely parallels that of U Geminorum, the latter being just one magnitude brighter. At Harvard the minimum brightness of SS Aurigæ has been measured as 15·9m., equivalent to 14·7m. in Prof. Nijland's system.

Mr. Torvald Köhl (*Astr. Nach.*, 4813) obtained further observations of 25, 1913, Ursæ Majoris during January–March of this year, from which the period of twenty-eight days gains additional weight.

A new variable star, 2, 1915, Cephei, has been found by M. Kostinsky, using the stereo-comparator (*Astr. Nach.*, 4809). The photographic magnitude increased by three units between November 29, 1911, and November 6, 1913, when it was 10·0m. M. Blazko has made confirmatory observations.

THE VICTORIAN OBSERVATORY.—The existence of this institution—better known as the Melbourne Observatory—is now definitely threatened. From Australian papers we learn that the State Astronomer, Mr. P. Baracchi, tendered his resignation last August after some thirty-nine years of Government service, the last fifteen years as successor to Mr Ellery. According to the *Age*, no successor is to be appointed, the State Government having decided to drop the work, thereby saving upwards of 4000*l.* annually. We trust some scheme of Commonwealth control will be evolved before it is too late.

THE PROPER MOTION OF A.G. WA. 5002.—In *Astr. Nach.*, No. 4814, Mr. R. J. Pocock, Nizamiah Observatory, Hyderabad, states that this star, No. 267 in Mr. van Maanen's recent list of proper-motion stars, has been photographed on two astrographic plates, neither of which shows any trace of proper motion.